

the cost of 3 strategies: 1) axillary lymph node dissection; 2) sentinel lymph node biopsy followed by distant axillary lymph node dissection in case of positive sentinel lymph node; and 3) sentinel lymph node biopsy with intra-operative histological examination and axillary lymph node dissection for positive cases. A multivariate probabilistic sensitivity analysis was conducted on identification rate, complication rates, sensitivity, specificity and length of hospital stay. **RESULTS:** The sentinel lymph node biopsy is less costly than axillary lymph node dissection in the early stages of breast cancer. Intra-operative histological examination of sentinel lymph node significantly reduces the cost of the procedure. Data on molecular intra-operative examination couldn't be integrated in the present study as no French cost data were available. In a systematic review, no survival difference could be demonstrated between the three strategies in early stage of breast cancer and quality of life was found to be better with sentinel lymph node biopsy than with axillary lymph node dissection. Nevertheless, more data are needed to integrate these results in a cost-effectiveness analysis. **CONCLUSIONS:** The study confirms the interest of sentinel lymph node biopsy in early stage of breast cancer. The cost comparison helps to determine the choice of the intervention alongside other arguments as women's preference, efficacy and safety.

SURGERY - Patient-Reported Outcomes & Patient Preference Studies

PSU22

HEALTH-RELATED QUALITY OF LIFE IN PROSTATE CANCER - COMPARISON OF ROBOT-ASSISTED AND OPEN SURGERY

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OBJECTIVES: The advent of robotic surgery to prostate cancer treatment has been justified by improved convalescence, fewer medical complications and decreased morbidity in comparison with traditional operating techniques. Furthermore, robotic surgery has been claimed to achieve better results concerning urinary continence and sexual factors. Our aim was to find out whether these claims are realized in an unselected material of a large university hospital. **METHODS:** An ongoing observational follow-up study in the real-world setting of a university hospital using the 15D generic health-related quality of life (HRQoL) instrument. Patients entering for treatment of prostate cancer were asked to fill in the HRQoL questionnaire at baseline and 3, 6, 12 and 24 months after entering treatment. **RESULTS:** So far, 123 patients have undergone surgery: 76 in the robot-assisted laparoscopic prostatectomy group (RALP, mean age 60.6 years) and 47 in the open surgery group (OS, mean age 61.5 years). The baseline prognostic Gleason score did not differ in a statistically significant manner between the groups (6.91 vs. 6.98, $p=0.593$). The mean HRQoL score in the OS group was slightly lower at baseline than that in the RALP group (0.940 vs. 0.920), but the difference was not statistically significant. During the two-year follow-up the HRQoL score remained slightly lower in the OS group at all follow-up points, but none of the differences was statistically significant. At the three-month follow-up the RALP group fared statistically significantly better on the dimensions of "excretion" ($p<0.05$) and "sexual activity" ($p<0.01$), but at the subsequent follow-up points the statistically significant difference had disappeared. The dimension of "vitality" did not differ between the groups at any of the follow-up points. **CONCLUSIONS:** The benefit from robot-assisted prostate surgery was in our material so small that it probably does not offset the high cost associated with the robotic approach.

PSU23

WOMEN'S PREFERENCES FOR BREAST RECONSTRUCTION: A STUDY USING A DISCRETE CHOICE EXPERIMENTS

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OBJECTIVES: Immediate or early breast reconstruction (BR) a viable option for the majority of women with breast cancer. However, only 5.6% of the mastectomy patients underwent BR in Taiwan. Quantitative evidence on the preferences of women for BR is limited; this study, therefore, elicits such preferences. **METHODS:** Face to face patient interviews were conducted on 156 women who had previously undergone a therapeutic mastectomy, of whom 60 had also undergone a BR. These women were asked to choose between hypothetical BR profiles featuring six attributes: (1) material used for reconstruction, (2) number and duration of operations, (3) failure rate, (4) aesthetic result and (5) out-of-pocket payment (in NT\$), and additionally had the option to choose not to undergo BR. The relative importance of attributes and trade-offs that the patients were willing to make among them were examined using a conditional logit regression model. **RESULTS:** Coefficients for all treatment attributes were significant with a prior expected direction. Women had a significant positive preference for autologous tissues, shorter operations, 'excellent' aesthetic results, a reduction in failure rate and in out-of-pocket payments. Expected 1% reductions in the chance of failure were associated with a willingness to pay of NT\$40,000. Women would be willing to pay NT\$22,000 to replace implants with autologous tissues, NT\$81,000 to reduce operation time from 8 hours to 2 hours, and NT\$86,000 to increase the aesthetic result from 'excellent' to 'moderate'. **CONCLUSIONS:** These findings provide insight into how BR are viewed and valued by women, and how future advances in surgical techniques will increase the uptake of BR by meeting women's preferences for reduction in length of time of operations and failure rate, as well as improvement in aesthetic results.

PSU24

THE EQUIVALENCE OF REMOTE ELECTRONIC AND PAPER COLLECTION OF PATIENT REPORTED OUTCOMES (PROS): A CROSSOVER TRIAL

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OBJECTIVES: The collection of pre- and post-operative Patient Reported Outcome (PROs) have traditionally been used to assess the benefit of medical and surgical interventions. More recently, individual patient level PROs have been used in everyday clinical practice. Online website 'electronic' collection, so called remote ePROs, provides a platform to collect scores at regular intervals and report results back to both patients and their clinicians. Chronic conditions can then be monitored over time to compare the response to treatment with that of other patients. The primary aim of this study was to assess whether scores collected electronically via an online internet website (ePROs) are equivalent to scores collected via the traditional pen and paper format (PROs). **METHODS:** A group of 47 patients, who had previously undergone open hip debridement for femoroacetabular impingement, were allocated to one of two groups as part of a randomized crossover study. As per the 'International Society for Pharmacoeconomics and Outcomes Research (ISPOR) ePRO Good Research Practices Task Force Report', this study was powered to rule out a difference between PRO and ePRO assessment of 0.3 standard deviations. Group 1 completed the online ePRO scores- Oxford, McCarthy, UCLA and HowRu score- followed by the PRO paper equivalents one week later, and Group 2 completed the scores in reverse order. **RESULTS:** The difference between the online ePRO and paper PRO Oxford score in Group 1 was 1.6, 0.9 to 2.4 (mean, 95% confidence interval (CI)) and in Group 2 was 0.8, 0.2 to 1.3 (mean, 95% CI). There was no significant difference between Group 1 and Group 2. Therefore analysis revealed an ePRO Oxford score of 32.8, 29.7 to 35.8 (mean, 95% CI) and a PRO score of 33.0, 29.9 to 36.1 (mean, 95% CI). **CONCLUSIONS:** Remote online ePRO score collection using this website is equivalent to paper PRO collection.

PSU25

BALLOON KYPHOPLASTY INCREASES QUALITY OF LIFE IN CANCER PATIENTS WITH VERTEBRAL COMPRESSION FRACTURES

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OBJECTIVES: Vertebral compression fractures (VCFs) are a fairly common and painful result of cancer but little is known about the quality of life (QoL) in these patients. The randomised controlled trial (RCT) CAFE, comparing balloon kyphoplasty (BKP) to non-surgical management (NSM), is the only RCT that has been conducted in cancer patients with VCFs. The objective of this study was to use data from CAFE to analyse QoL in cancer patients with VCFs and to analyse the impact of BKP on QoL in these patients. **METHODS:** SF-36 data from the CAFE study were analysed. Answers to the SF-36 questionnaire were translated into eight subcategories which in turn were mapped to health utilities. At baseline, complete data were available for 55 patients in the control group 65 patients in the treatment group; both groups had lost seven at 1 month's follow-up. Although the original study ran for 12 months, high crossover rates from control group to treatment after 1 month posed a challenge to an analysis of long-term QoL effects. **RESULTS:** At baseline, the NSM group had a mean utility (SE) of 0.27 (0.027) while the BKP group had 0.30 (0.027). After 1 month, the NSM group had a utility of 0.30 (0.030) and the BKP group 0.63 (0.029). The difference in utility at 1 month (0.33) was statistically significant ($p<0.001$). No significant differences in baseline QoL or QoL impact of BKP were observed between different underlying cancer types. Health utilities appeared to be relatively stable between 1 month and 12 months. **CONCLUSIONS:** VCFs in cancer patients are associated with significant QoL impairment. QoL is meaningfully improved by treating painful VCFs with BKP, independently of the underlying cancer type. This information can be used as a basis for further research, such as analyses of the cost-effectiveness of BKP.

PSU26

HEALTH-RELATED QUALITY OF LIFE IN FAMILIAL AMYLOIDOTIC POLYNEUROPATHY BEFORE AND AFTER LIVER TRANSPLANTATION: A SYSTEMATIC LITERATURE REVIEW

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OBJECTIVES: Liver transplantation (LTx) is indicated in familial amyloid polyneuropathy (FAP) to prevent long term disease progression. This study aims to assess health-related quality of life (HRQoL) in FAP patients before and after LTx. **METHODS:** A systematic review was conducted by January 2012 through Cochrane Collaboration, Medline, EMBASE, and Lilacs databases. Outcome measures were mental and physical dimensions assessed by HRQoL questionnaires. **RESULTS:** Five studies met eligibility criteria. Before LTx, FAP patients presented lower scores measured by EuroQoL (EQ-5D) index when compared to general population (18-34 years: 0.81±0.02; 35-49 years: 0.68±0.03; 50-64 years: 0.57±0.04; >65 years: 0.58±0.05 versus 0.92±0.00; 0.88±0.00; 0.84±0.00, and 0.79±0.00, respectively; $p<0.0001$ for all comparisons). When compared to other chronic diseases, FAP presented a significantly worse HRQoL (FAP[50-64 years]: 0.58; diabetes: 0.76; stroke: 0.69; emphysema: 0.68; heart failure: 0.64; rheumatoid arthritis: 0.66; $p<0.0001$ for all comparisons). After LTx, HRQoL assessed by Short Form Health Survey (SF-36) was lower in FAP when compared to non-PAF transplanted patients ($p<0.04$). Physical and emotional well-being domains 4 years after transplantation were significantly lower compared to non-FAP transplanted (physical:35%-75%; emotional: 24%-54% reduction) and general population (physical:16%-55%, emotional: 10%-39% reduction). A new score was developed to measure the difference between HRQoL at 6 months after and